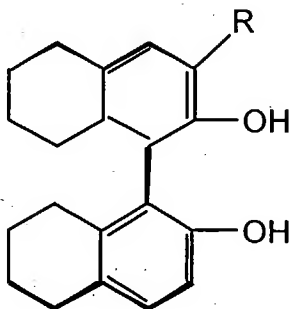


IN THE CLAIMS

Please amend the claims as follows:

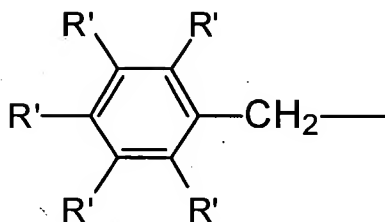
1. (currently amended) A compound of the formula



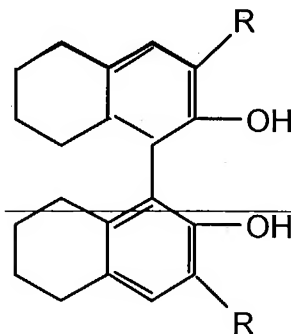
1

wherein:

R is C₁ to C₂₀ alkyl, C₃ to C₂₀ cycloalkyl, or benzyl of the formula

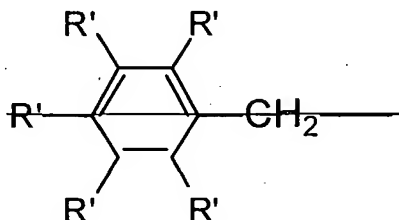


wherein each R' is independently H, alkyl or cycloalkyl of up to 6 carbons. ~~and/or a compound of the formula~~



2

~~wherein R is C₁ to C₂₀ alkyl other than methyl or t butyl, C₃ to C₂₀ cycloalkyl, or benzyl of the formula~~



~~wherein each R' is independently H, alkyl or cycloalkyl of up to 6 carbons.~~

2. (currently amended) A process for making 3-alkylated-5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol and/or ~~3,3' dialkylated 5,5',6,6',7,7',8,8' octahydro 2,2' binaphthol~~, comprising contacting 5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol with at least one alkene or cycloalkene in the presence of an acid catalyst.

3. (original) The process of claim 2 wherein the at least one alkene or cycloalkene is monoethylenically unsaturated and contains from 3 to 20 carbon atoms.

4. (original) The process of claim 3 wherein at least one alkene or cycloalkene is selected from the group consisting of propylene, butene, pentene, hexene, cyclopentene, and cyclohexene.

5. (original) The process of claim 2 wherein the acid catalyst is selected from the group consisting of aluminum chloride, trifluoromethanesulfonic acid, tosylic acid, phosphotungstic acid, silicotungstic acid, phosphomolybdic acid, zirconium triflate, aluminum triflate, polymeric perfluorinated sulfonic acid and polymeric sulfonic acid.

6. (original) The process of claim 5 wherein the acid catalyst is aluminum chloride, phosphotungstic acid, or phosphomolybdic acid.

7. (original) The process of claim 6 wherein the acid catalyst is phosphotungstic acid.

8. (original) The process of claim 2 wherein the contacting is done in the presence of at least one solvent selected from the group consisting of nitromethane, methylene chloride, dichloroethane, chlorobenzene, dichlorobenzene, and nitrobenzene.

9. (original) The process of claim 2 wherein the contacting is done at a temperature between 20°C and 220°C.

10. (original) The process of claim 9 wherein the temperature is between 90°C and 180°C and wherein the 5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol is contacted with a mono- or 1,2-disubstituted alkene.

11. (original) The process of claim 9 wherein the temperature is between 40°C and 90°C and wherein the 5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol is contacted with at least one alkene selected from the group consisting of 1,1-disubstituted alkene, tri-substituted alkene, tetra-substituted alkene or aryl-substituted alkene.

12. (currently amended) A process for making 3-alkylated-5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol and/or 3,3'-dialkylated 5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol, comprising contacting 5,5',6,6',7,7',8,8'-

octahydro-2,2'-binaphthol with a benzyl halide or tertiary alkyl halide, wherein the halide is bromide or chloride, in the presence of a Lewis acid catalyst.

13. (original) The process of claim 12 wherein the Lewis acid catalyst is selected from the group consisting of aluminum chloride, zinc chloride, boron trichloride, SnCl_4 , SbCl_5 , and ZrCl_4 .

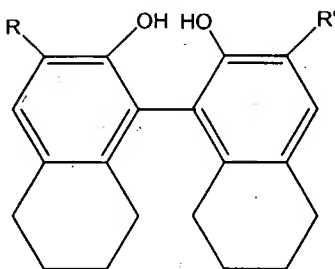
14. (original) The process of claim 13 wherein the Lewis acid catalyst is zinc chloride.

15. (currently amended) A process for making 3-alkylated-5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol and/or ~~3,3'-dialkylated-5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol~~, comprising contacting 5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol with an alkyl sulfonate, alkyl triflate, alkyl p-toluenesulfonate, or alkyl benzenesulfonate, in the presence of an acid catalyst selected from the group consisting of aluminum chloride, tosylic acid, phosphotungstic acid, silicotungstic acid, phosphomolybdic acid, trifluoromethanesulfonic acid and a rare earth metal triflate selected from the group consisting of scandium trifluoromethanesulfonate, ytterbium trifluoromethanesulfonate, and lanthanum trifluoromethanesulfonate.

16. (original) The process of Claim 15 in which the alkyl sulfonate is of the formula $\text{A-SO}_3\text{-B}$, wherein A is C_1 to C_8 alkyl, C_1 to C_8 fluorinated alkyl, C_6 to C_{10} aryl, or C_6 to C_{10} fluorinated aryl; and B is C_1 to C_{20} alkyl.

17. (currently amended) A process for making 3-alkylated-5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol and/or ~~3,3'-dialkylated-5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol~~, comprising contacting 5,5',6,6',7,7',8,8'-octahydro-2,2'-binaphthol with a benzyl, secondary or tertiary alcohol containing from 3 to 20 carbon atoms, in the presence of an acid catalyst selected from the group consisting of trifluoromethanesulfonic acid, sulfuric acid, HF, phosphoric acid, and aluminum chloride.

18. (currently amended) A compound of the formula



wherein:

R is H; and

R' is ethyl, C₃ to C₆ secondary, tertiary, or cyclic alkyl,

~~or a compound of the above formula wherein~~

~~R and R' are the same and are selected from the group consisting of~~

~~ethyl, C₃ to C₆ secondary or cyclic alkyl.~~

19. (canceled).